

The American Aloe (*Agave americana*) is the only plant this bird is ever seen feeding upon.

5. ADELOMYIA MELANOGENYS (Gould, Mon. pt. 9).

This species is never found in or near Quito, but only in the lower and warmer countries.

6. EUGENIA IMPERATRIX (Gould, Mon. pt. 11).

Prof. Jameson's specimens of this fine Humming-bird were obtained in the neighbourhood of Auca, on the road to Nanegal, at about 6000 or 7000 feet elevation. They were feeding on the *Alstræmeriæ*, *Daturæ* not being found in that locality.

7. CÆLIGENA WILSONI (Gould, Mon. pt. 11).

There must be some error when Bourcier states that he killed this species at an elevation of 10,000 feet, and in Nono, which lies at about 9000 feet. This bird belongs strictly to the warmer countries, such as Nanegal, which is only about 4000 feet in altitude.

8. AGLÆACTIS CUPREIPENNIS (Gould, Mon. pt. 12).

The females of this species have the glittering back, but not so brilliant as in the males.

9. HELIANTHEA LUTETIÆ (Gould, Mon. pt. 13).

This bird is found in the valleys of Lloa and Pelogalli, but not nearer Quito.

XLII.—*Review of Herr BÄDEKER'S* and Dr. BREWER'S† Oological Works.*

BIRDS'-NESTING and Egg-collecting are pursuits the practice of which has for some time ceased to be confined to truant school-boys, but, except by a limited few, the occupation of an Oologist has been, until very lately, regarded as much below the serious dignity of a scientific naturalist. Even now, there are ornitho-

* *Die Eier der Europäischen Vögel nach der Natur gemalt von FR. W. J. BÄDEKER, mit einer Beschreibung des Nestbaues von LUDWIG BREHM.*—Leipzig und Iserlohn. [In course of publication.]

† Smithsonian Contributions to Knowledge. *North American Oology.* By THOMAS M. BREWER, M.D. Part I.—*Raptores and Fissirostres.* Washington City: 1857. [Issued 1859.]

logists who smile with benignant pity at the simplicity of those followers of old Sir Thomas Brown's example who make a study of egg-shells. Not recognizing the possibility of deducing from them any ideas worthy to be entertained by sensible men, they regard the possessors of egg-cabinets simply as weak victims of an uncontrollable propensity for acquisitiveness, much indeed as Captain Lemuel Gulliver, of veracious memory, looked upon the Yahoos with their hoards of shining stones, whereof they were so "violently fond." But the number of these ornithological purists is decreasing, and at any rate there are persons enough—among whom we hope to count a majority of our readers—who think differently from them, and we will therefore waste no time in attempting to convert the remainder, or in offering any excuses for occupying these pages with a somewhat general article on Oology.

Both the works of which the titles stand at the head of this paper are most welcome additions to egg-literature. To that of Herr Fr. W. J. Bädeker we shall give priority of notice, since it saw the light before Dr. Brewer's. Brief allusion to its merits has already been made in a former Number of the 'Ibis' (*antea*, p. 203), and that it will be found of great utility to naturalists is not to be doubted; but it is fair to say that it has some drawbacks, among which its unnecessarily large size and the irregularity of its appearance are not inconsiderable. There are, besides, certain defects in the execution of the plates, of which we shall presently speak. With all this, however, it is to be highly commended. Four parts (*Lieferungen*) are now before us, each of which contains eight plates, comprising numerous figures, often indeed a good series, of varieties of the same species. Thus are afforded representations of no less than five examples of the eggs of *Buteo leucurus*, eight of *Sterna hirundo*, and of others in like proportion, and the specimens chosen for illustration, as far as we are able to judge, are generally well selected. When it is considered that in this portion of the work upwards of six hundred and eighty eggs are figured, while as yet but about two hundred *nominal** species are treated of, some accurate notion

* Of course it is only natural that Herr Ludwig Brehm, who, assisted by Herr W. Pässler, is the author of the letter-press accompanying Herr

may be conceived of the extent to which the illustration of varieties is carried. Notwithstanding this, the low price of the work is marvellous.

Our limits will not permit us to comment at length upon all the four parts of Mr. Bädcker's book; let us therefore take the first only. We can hardly go into the question as to what birds should be included as European, or recognized as good species, and what should not, but the views of those who consider the *Aquila clanga* of Pallas from Central Asia distinct from *A. naevia*, may receive strength from the appearance of the eggs figured in Plate I., wherein the representations of the Eastern are decidedly larger, as is the case with the birds, and less deeply marked than those of the Western examples. In Plate II. the three figures of the eggs of the Osprey give but a faint idea of the numerous varieties presented by a really fine series, such as is possessed by at least one gentleman in this country. By Plate III. the characteristic differences of the eggs of the species of Buntings therein figured are very fairly preserved, and a respectable selection of each is given. For Plate IV., which comprises several of what according to the Editor are known in English as the "Trush" and "Ouzel," we cannot say so much. Those well-known favourites, "oft the earliest of the year," to which we have been used all our lives, the eggs of the Misseltoe and Song Thrush, and the Blackbird, have small justice done to their beauty; and we should like to have known a little more about the specimens figured of the supposed eggs of the *Turdus minor* of Gmelin, than that they were sent from Labrador "with the birds,"—a phrase greatly employed, it is true, by dealers, but which may mean anything or nothing, and we fancy in practice most generally means the latter. Plates V. and VI. afford us some examples from the Grallatorial order, and it is in these figures that the chief defect of the artist first becomes very apparent. Any person slightly acquainted with the principles of drawing must know that a marking, be it spot or blotch of any

Bädcker's plates, should walk in the way of his father; but there can be little doubt that many of the so-called 'species' erected by "the sturdy Nestor of German Ornithologists" are not even permanent local races, much less 'sub-species,' as some naturalists have chosen to consider them.

shape, on a convex surface, such as an egg-shell, presents its full form and dimensions only when placed exactly in front of the spectator, and consequently that all the markings, except the comparatively few on the portion of shell nearest to the eye, seem to be more or less contracted or in profile according as they are situated at a greater or less distance from that portion. On this principle therefore all drawings of eggs should be made. Simple, however, as it would appear to do this, yet in practice, as we can testify from our own experience, it is by no means easy. Hence it arises that there are few persons who can delineate an egg so that it may look like what it is intended to be, and not like a representation of a flat surface. Mr. Bädcker is much given to this defect, and we see in numerous instances the spots at the margin of his figures, which resemble eggs in being of the same shape as their shadows, exactly the same in size and form as those at the centre. This is especially to be observed in figs. 4 and 5 of Plate VI., representing the eggs of the Golden Plover and Dotterel. No amount of shading, no judicious arrangement of light, will avail anything towards producing on a flat surface the semblance of a convex one, so long as this first principle is neglected. Plate VII. is devoted to the Common, Arctic, and Little Terns, the different varieties of which we do not think have ever been so well illustrated, in spite of the one prevailing defect to which we have just alluded. Plate VIII. introduces us to some of the Ducks. We are not sorry to see that our artist figures mottled eggs of birds of this family, for we are inclined to think that the spots so often to be observed on eggs of the Eider, and occasionally on those of other ducks, are not to be regarded as monstrous, but as having the character of true markings. We doubt if eggs of the King Duck are generally so much more deeply coloured than those of the Common Eider, as would appear from Mr. Bädcker's drawings. Mr. Hewitson in the last edition of his work has figured (Eggs B.B. 3rd ed. Pl. CXV., fig. 2) one of the former, almost as pale in colour as a Wild Duck's, but until a larger series of more carefully identified examples than those usually received from Baffin's Bay are obtained, we hardly venture to pronounce judgment on this point.

We will, however, make bold to say that there is always a difference between the hues of the eggs of the Common and Velvet Scoters, unless indeed they have both suffered from the effects of air and light, and a more decided difference than is shown in Herr Bädeker's figures.

With regard to the remainder of the work, it will suffice to point out one or two slight inaccuracies, and to take a cursory glance at some of those points which may be regarded as presenting most interest to British Oologists. Our authors are certainly in error when they speak of the Three-toed Woodpecker of Europe being found in North America. Though by Swainson and older writers one of the Nearctic species was mistaken for the Linnean *Picus tridactylus*, there can be no question of its distinctness. So also it is a mistake to suppose that the range of the Common Kingfisher extends to Eastern Asia and Africa, each of these regions possessing its own stock of allied but quite independent forms. We suspect too that Herr Schrader, inverting the proper process, and identifying (?) the bird by the egg, instead of the egg by the bird, has successfully laid the foundation of an error in asserting that the Chiff-chaff goes as far north as 70° lat. We are indeed pretty sure that if it occurs at all in the Scandinavian peninsula, it is only in the extreme south. But the refutation of inaccuracies such as these, several more of which could be mentioned, many persons may consider irrelevant to the present subject, though for our own part, regarding the geographical distribution of species as one of the most interesting and important studies within the whole range of natural science, we are at all times anxious to see mistakes of this sort corrected.

We must remark that though our authors follow a practice which we cannot but commend, in giving for each species an English and French as well as a German common name, yet, by some extraordinary mischance, not to take notice of those accidental misspellings to which writers of a foreign language, and that language English, are always liable, they seldom light upon a name appropriate, or indeed at all commonly in use. Thus, what reader in this country would recognize *Aquila heliaca* as the "King's Eagle," or *Falco communis* as the "Blue-black

Falcon"? And we suspect, though we will not take on ourselves to assert the fact, that there are similar instances to be found among the French synonyms.

The information given in Mr. Bädcker's work respecting the nidification of the Green Sandpiper will most likely astonish the minds of British Ornithologists, though they may be already prepared for something extraordinary in the economy of a bird whose comings and goings are certainly not well understood. Those gentlemen who have lately tried to elucidate the mystery will be at least surprised to learn that they should have searched for the eggs of this species not only in the localities usually frequented by other birds its nearest allies, but as "the fir-trees are a dwelling for the Stork," so are they also, it would seem, occasionally for the Green Sandpiper! Hear our authors:—

"The nest is sometimes on the ground in a depression, or on a little hillock or the stump of a tree. The four eggs lie in a sort of nest of twigs (*Genist*), dry-grass, or fir-tree-needles. Often, however, also an old nest of *Turdus musicus* or *T. viscivorus* will be used; indeed Forester Hintz once found the eggs in a nest of *Columba turtur*, eighteen feet from the ground."

This sounds odd to our ears, but the original account, which appeared, we believe, in 'Naumannia,' is so circumstantial that we hardly know whether what seems to us the antecedent improbability of such a thing justifies us in doubting the statement. In our ignorance of the frank-spoken Forester's capabilities of rightly judging the evidence of his own senses, and giving him all the credit due to a man whose veracity has only been impeached by the character of his own testimony, which is certainly contrary to the experience of most people, we are compelled to look upon the question as a thorough contest of opposite improbabilities, and to confess that it would be a relief to us if his statement were confirmed by some other reliable witness.

There is one reflection soothing to our national vanity, with which we close Herr Bädcker's portfolio of plates and letter-press. This is, that though we do not pretend to know what gems "of purest ray serene" the dark unfathomed drawers of German egg-cabinets may contain, we are disposed to question

the existence there of many of the '*Desideratissima*' of our collections. It does not appear that any egg—certainly not of any so-called "British Bird"—*—is as yet figured in this work, of which one Oologist or another in this country has not examples, often of the best possible authenticity. This brings us to make a few remarks on the progress which egg-collecting has made within the last few years among ourselves.

We have now before us the cover of Part V. of Mr. Hewitson's *second* work (the *first* edition of the "Eggs of British Birds"), bearing date "1st November, 1843," on which that gentleman printed a list of what were then, as far as he knew, '*Desiderata*' to English collections. This list contains 52 species, 10 of which he subsequently obtained in time to figure them in that edition. Of the remainder, 15 more were represented in his *third* work, completed in 1856 †. From this, however, he left out one—very properly considering that, though he had before included it, the specimen figured was not sufficiently authentic. This made the real increase 14, and the number still required 28. Of these at least 8 are now in British cabinets, and one is a doubtful, not to say a bad species, which thus reduces the number of '*Desiderata*' to 19. To this number 16 more must be added, to allow for those species which have of late been included with sufficient reason in the British list, or respecting the eggs of which, though they may have been figured, justifiable doubts may be entertained. Thus we obtain a final result of 35, as probably representing the existing deficiencies in the Oology of these islands. These 35 are, in our opinion, as follows:—

Swallow-tailed Kite.	Parrot Crossbill.
Snowy Owl.	European White-winged Crossbill.
White's Thrush.	American White-winged Crossbill.
Gold-vented Thrush.	Nutcracker.
Dalmatian Regulus.	MacQueen's Bustard.

* The European White-winged Crossbill can hardly be said to be an exception, for the egg represented (Pl. xx. fig. 10), though "beglaubigt ächte," was laid in a cage.

† We must not be misunderstood to mean that Mr. Hewitson's *third* edition comprised only 15 more species than his *second*, but that these 15 were included in his list of '*Desiderata*' above mentioned.

Sanderling.	Spur-winged Goose.
Grey Plover.	Bewick's Swan.
Great White Heron.	American Wigeon.
Esquimaux Curlew.	Steller's Western Duck.
Brown Snipe.	Buffel-headed Duck.
Curlew Sandpiper.	Sabine's Gull.
Knot.	Bonapartian Gull.
Buff-breasted Sandpiper.	Cuneate-tailed Gull.
Little Stint.	Ivory Gull.
Schinz's Sandpiper.	Pomarine Skua.
Pectoral Sandpiper.	Capped Petrel.
Little Crake.	Wilson's Petrel.
Red-breasted Goose.	

We doubt not there are many gentlemen who are in the full belief that they possess one or more specimens of several of the species named in the above list, and we know it is not without risk of incurring their displeasure that we venture to express our hesitation to agree with them, for in some cases to doubt the authenticity of a collector's specimens is to doubt his word. But we do *not* assert that such eggs do not exist, or even that we may not have seen them; still less do we set up our opinions as infallible. All we would do is earnestly to implore those from whom we have the misfortune to differ calmly and dispassionately to try and examine for themselves the amount of evidence on which the authenticity of their specimens depends. It is, we allow, no use to require its being of such a nature as would be admitted in a court of justice, though that would be desirable; but we ask, is it such as ought to carry conviction to a plain-thinking and unbiassed mind? We fear not. The homely proverb, "Every man thinks his own geese to be swans," is not inapplicable on those occasions, for, as soon as a person becomes the possessor of a supposed much-desired specimen, he becomes also at once and unconsciously a firm believer in its genuineness. However, we hardly dare venture further: the duty of 'Devil's Advocate' is an ungracious one, but, if it be found necessary to satisfy the public as to the merits of a candidate for the honours of Saintship, much more is it requisite that the fair fame of a specimen which is to command the respect of Oologists should be as free from suspicion as "Cæsar's wife."

And now a few words on the best means of remedying these

deficiencies. For the eggs of the first in our list, the Swallow-tailed Kite—hardly, indeed, to be called a British Bird—we must look further south than we have mostly been accustomed. The Oologists of the United States can give only second-hand accounts of its nidification, but we hope it may fall to the lot of the painstaking Mr. O. Salvin to procure what we want from Central America. A supposed egg indeed exists in the British Museum, but without resting, as far as we can learn, upon any reliable authority. The Snowy Owl's, we are led to hope, may “some year when the lemmings again swarm in the mountains,” reward the unwearied efforts of the most experienced and, we are glad to add, the most successful collector of our time, Mr. John Wolley, who, we trust, like an oological Charles XII., is still resolved to “think nothing gain'd while aught remains,” and determined that all shall be his “beneath the polar sky.” The clue to the nesting-places of the two Thrushes in our list is still to be found, and we cannot add to the already published information relating to the Dalmatian Regulus. For the Crossbills, the sub-arctic forests of both Old and New Worlds are to be investigated with the best chances of success, and even while we write we hear that an accomplished Naturalist in the North of England has good expectations of some authentic eggs of *Loxia pityopsittacus*. The Nutcracker is perhaps something of a reproach to British birds'-nesters, for we understand that its eggs are in more than one Continental cabinet, but we feel pretty confident that they are within the reach of any person who would pass the first three or four months of the year in the Swiss forests (by the way, a friend has reminded us that snow-shoes, either on the Canadian or the Scandinavian plan, would be useful auxiliaries), and we beg leave to make this suggestion to the members of the new ‘Alpine Club,’ some one of whom might find the occupation a pleasant variety to the now hackneyed adventures on “Peaks, Passes, and Glaciers.” For MacQueen's Bustard we must look to Persia if not to our Indian Empire, and doubtless not many years will pass before we obtain some tidings of its nidification, and specimens of its eggs. Professor Nordmann is said to have found the Great White Heron breeding in Poland, but for ourselves we can place no confidence in the many supposed eggs

said to come to this country from Russia, though there is little doubt that satisfactory specimens might be obtained thence. The greatest interest, however, gathers round the nidification of those Waders, such as the Grey Plover, Sanderling, Pigmy Curlew, Knot, and Little Stint *, which at irregular intervals and for short periods throng our shores in large bands, and yet of whose breeding-quarters what Englishman can speak with certainty? Dr. Middendorff, indeed, obtained eggs of the first mentioned, one of which is figured in his work, but he failed to penetrate the mystery which envelopes the movements of the others. Even almost at the extremity of the North-East Cape, in latitude 78° N., where the continent extends nearest to the pole of anywhere in the world, this intrepid voyager found in spring flocks of these species, restlessly pressing onwards, and in autumn there they were again, returning with their broods, to winter perhaps in the burning plains of India, by the great lakes of Central Africa, or even to push their outposts as far as the Cape of Good Hope or the still unknown shores of New Guinea. Vain seems at present the expectation of triumphing over the obstacles which offer themselves to the Oologist in this direction, but when the present undeserved unpopularity of Polar Exploration is overcome, when political emergencies have passed away, and adventurous spirits in our navy find no scope for their energies in a piping time of peace, may we not hope that a period may return when the fond dreams of old "Arctics" may be realized, expeditions fitted out, and the circumpolar regions reached, while their zoology is investigated by worthy successors of Richardson and Sabine? †

We depend on the Naturalists of Canada and the United States helping us to a knowledge of the peculiarly North

* We had almost added to the number the Grey Phalarope, for, though there is reason to think that bird breeds in Iceland, we have no confidence in any of its reputed eggs received therefrom, but we recollect the specimen in the late Mr. Yarrell's cabinet, which, at his sale in 1856, passed into the hands of one of the keenest and most kind-hearted of collectors. It came from Melville Island, and is probably genuine.

† In an admirable article on the additions made of late to European oology, the editor of 'Naumannia' recently stated that the Little Stint had been found breeding in Siberia—but without giving any authority for the assertion. ('Naumannia,' 1858, p. 125.)

American Waders, such as the Esquimaux Curlew, the Brown Snipe, the Buff-breasted, Schinz's and the Pectoral Sandpipers. Eggs of the first of these are said already to have been taken in Labrador, though we do not learn on what authority, and of the third and last we believe specimens exist even now in Trans-Atlantic cabinets, obtained by Professor Kumlein and Dr. Heermann. The Little Crake may be expected from Southern Europe, or, through some follower of Mr. Tristram and his friends, from Algeria. The Red-breasted Goose has already been discovered breeding in Siberia by Dr. Middendorff, and he figures one of its eggs, while the Spur-winged must be sought for in Africa. The *incunabula* of Bewick's Swan still form a puzzle. We do not credit the statement, though the assertors and repeaters of it are no mean authorities, that it nests in Iceland; but believe it to be a more eastern species, and, if any part of Europe furnishes it with breeding quarters, we would perhaps indicate the Samöied country drained by the Petchora as the favoured spot, on the dreary coasts of which also, or in Nova Zembla, Steller's (miscalled the "Western") Duck, which was found by Dr. Middendorff breeding in Eastern Siberia, may rear its young in peace. For the American Wigeon and Buffel-headed Duck the Hudson's Bay Territory is our land of promise, while we fear that for the different species of Gulls—except indeed the Bonapartian, which possibly has not a Polar range, and may be found breeding even as far south as the Saskatchewan or Athabaska valleys—we must await the *Saturnia regna*, and the renewed Arctic expeditions which we have above predicted. Hopes respecting the Pomerine Skua from Lapland, Dr. Middendorff having already obtained its eggs in Siberia, have been held out to us by Mr. Wolley, while, as a contrast to nearly all the localities we have enumerated, those Islands of the Blest, the remains of the old Atlantic Continent and the "Cays" of the West Indian Archipelago may be the scene of a "crowning victory" over the last in our list—the Petrels—and finally reward the Oologists' "youth of labour with an age of ease."

To Doctor Brewer's work we cannot devote the space which the care bestowed upon it should deserve at our hands. It really is, what it professes to be, "designed to describe and

illustrate the Oology of North America," and the descriptions are not limited merely to notices of those species of whose eggs the author can supply illustrations, but give as much information as possible about what are still '*Desiderata*' to him. It possesses, too, a quality as remarkable, we regret to say, for singularity as for merit: "In all instances the illustrations are taken directly from the egg itself, and in none has any attempt been made to make use of drawings," for, with a few praiseworthy exceptions, this is a fact which cannot be asserted of oological works in general. However, we do not entirely agree with the Doctor in the remarks which follow the above-quoted passage, for we consider that we have in England at least one draughtsman whose works give an unqualified contradiction to our author's opinions; but we have already in this article noticed the great practical difficulty of depicting eggs accurately, and the consequent scarcity of competent artists. In the absence, therefore, of a Trans-Atlantic Mr. Hewitson, Dr. Brewer is quite right in the course he has pursued, which is that of profiting by an "ingenious application of photography to the aid of lithography;" and the result is a series of figures, somewhat deficient, perhaps, in brilliancy, yet certainly sufficiently well coloured, and of course unsurpassed in the fidelity with which characteristic markings are rendered.

Of the letter-press of the work we are also justified in speaking highly, though it is no more than might be expected of the author. In his own language, his design "embraces as its legitimate subjects the external shape, size, and markings of the eggs, the nests, or the substitutes for nests, the general habits of the birds peculiar to the breeding season, and their geographical distribution, especially so far as the last may be in connexion with their nesting;" and we are bound to say that Dr. Brewer is not one of those writers who keep the word of promise to the ear, but break it to the hope. If there be any let or hindrance to the due performance of what he has undertaken, it is a stern necessity—*quam vincere non datur*—that compels him to yield. Oology in the United States labours under the disadvantage of having but few votaries, though of a truth their paucity is in some measure compensated for by their

ardour. We therefore heartily wish well to the grand undertaking commenced by the Smithsonian Institution, which was announced to our readers in our last number by Professor Baird (*antea*, p. 334), and trust it will enable our author, in a supplementary publication, to fill up many of those voids, the existence of which we regret as much as he can. The following extract from the Doctor's Introduction affords a remarkable contrast to the results we just now laid before our readers with regard to the oology of these islands:—"The present Part embraces the descriptions and illustrations of the eggs of the Order *Raptores*, and of the Tribe *Fissirostres* of the Order *Insessores*. So far as he [Dr. Brewer] is at present aware, these include seventy-nine species inhabiting North America. Of these the eggs of no less than twenty are still entirely unknown to him, while of those of eleven others he has no means of giving illustrations." That is to say, the deficiencies of North American as compared with British Oology, in this Order and Tribe, are as $\frac{3\frac{1}{9}}{7\frac{1}{9}}$ to $\frac{2}{44}$, or more than 8.5 to 1!

Lest it be thought that Dr. Brewer is one of those "faultless monsters whom the world ne'er saw," we must, we suppose, particularize a few points wherein we must join issue with his opinions; but this we assure our readers we do not do without some diffidence. We are most inclined to complain of what we think is a tendency on his part to hasty generalization: thus, the worthy Doctor argues that additional proof of the distinctness of Nuttall's *Buteo montanus* and the *B. borealis* of authors is furnished by the differences observable in their eggs. Now, of the first-mentioned bird, since it appears that he has seen only *two* examples, both from the same nest, it seems hardly fair to *assume* that these represent the typical appearance of the egg; and, again, even if it be that they do so, and also that the learned author's assertion be correct, that "they bear no resemblance to any eggs of *B. borealis*" that he has ever seen, we cannot agree with him in his deduction, because the character of one of them, judging from his figure (Pl. I. fig. 6), is exactly that often seen in the eggs of Buzzards generally, and, we take it, of *B. borealis* among them. We are not in a position to pass an opinion on the propriety of separating the birds specifically,

and, if we were, this is not the place to discuss the question ; but we must record our belief that the case of the separatists is not strengthened by the evidence adduced by our author. .

As a set-off to this, we must give the Doctor all praise for, in most cases, resisting the strong temptation by which some naturalists are often overcome, to erect into species those races of birds, permanent though they be, which, by more general consent, are on good grounds supposed to represent the same creation in both Old and New worlds. It is true that the opposite course, which also has its strong advocates, of taking no heed whatever of the differences which may exist between these regional varieties, is greatly to be blamed, and it appears to us that the *via media* is the safest road to travel, duly considering that local differences do not of necessity make specific distinctions. Thus, though we are far from considering the Golden Eagles of Europe and North America as otherwise than specifically identical, we highly applaud Dr. Brewer's declining to figure an egg of the former race in default of one of the latter. We have said that our author, in most cases, is free from a species-making inclination ; but there are exceptions, such as the Fish-Hawk and Short-eared Owl of America, which he regards as indubitably distinct from their European *pendants* ; and, with regard to the former, complains of the "unaccountable persistence in error" on the part of some English naturalists, not one of whom, we venture to assert, ever quoted "extracts written exclusively in reference to the American bird" without mentioning the source of the information, a fact alone sufficient to guard against any chance of mistake. Dr. Brewer remarks that "in their habits the European and American birds are much more decidedly different than in their own markings or in those of their eggs," and proceeds to particulars, most of which are questionable, as, for instance, that the bird from the Old World "is found only in solitary pairs," and "rarely builds on trees," but "sometimes on the ground among reeds," though it "almost uniformly resorts to rocky cliffs to breed." The fact has not been sufficiently considered, that the habits of birds, as of men, vary according to the circumstances in which they are placed, such as the facilities of getting food or lodging. It is no more rational because the

Osprey does not live in large societies like the Fish-Hawk, to conclude that, therefore, they must be specifically distinct, than it would be to suppose that the back-woodsman and the Bostonian are not of the same origin because the one prefers the crowded city and comforts of civilization, and the other seeks solitude and hardships in the far West. We refer Dr. Brewer to Dr. Kjærboëlling's 'Danmarks Fugle,' wherein (p. 11) is mentioned an instance of "many pairs" of the European Osprey breeding for about forty years in the woods at Holsteinborg in Zealand, and we believe the instance is not a solitary one in the districts where the bird most abounds. In these countries too, as, for example, in Lapland, we have Mr. Wolley's testimony ('Catalogue of Eggs,' 1855) besides, for its commonly breeding "in high trees," and the assertion that it builds "on the ground among reeds," rests on no better authority than the story of its having its left foot subpalmed, as was stated by Linnæus, and is about as true. In Scotland certainly it often makes, or rather made, its nest on ruined towers, and even occasionally, but very far from "uniformly," on rocky islands; but this is as certainly a departure from its usual habits as observed in other places, and is perhaps occasioned by the unrelenting persecution to which it is there subjected. We will, however, suggest a difference in the eggs of the American and European birds which we ourselves have invariably observed, and to the benefit of which species-makers are perfectly welcome, and this is, that we can always distinguish between eggs from the two continents with our eyes shut—by the *smell*.

We had intended to make some observations on other species, especially our author's "*Hierofalco sacer*," under which name he blends the two easily recognizable races of the great northern Falcon (*Falco candicans*, Gm., and *F. islandicus*, Sab.), both of which we doubt not occur in the United States, as they do in the United Kingdom; and also on the singular fact* of the egg

* We say "fact" because Dr. Brewer expresses no doubt of it; but is it quite certain there can be no mistake here? It is very seldom that *Astur palumbarius* lays spotted eggs, but we never saw one *even ascribed* to that species with anything like the amount of mottling exhibited by Mr. Winslow's example (Pl. I. fig. 5).

of the American Gos-Hawk being so unlike that of its European congener, besides remarking on some other points; but the length of our article warns not to try further the patience of our readers.

We cannot, however, conclude without referring to the loss we have recently experienced in the removal from among us of one of the oldest, if not the very oldest, of British egg-collectors. The frequenters of the meetings of the Linnæan and Zoological Societies will henceforth look in vain for the kindly smile and hearty greeting of John Drew Salmon, one of the pioneers of oological discovery, and an active member of that band of zealous working men which numbered in its ranks Hoy and Heysham and Yarrell, besides others still happily spared to us. Long may they continue to enjoy the results of their hard-earned labours, and that they may be succeeded by a generation as indefatigable as they themselves were, is, we are sure, as much their wish as it is ours. Mr. Salmon, we are informed, has bequeathed his valuable cabinet of eggs to the Linnean Society, where we trust it will be preserved intact, as a monument to the memory of a thoroughly single-minded man, and an example to future naturalists of the care and discretion necessary in forming an eminently trustworthy oological collection.

September, 1859.

XLIII. *On the Ornithology of Northern Africa.* By the Rev. H. B. TRISTRAM, M.A., F.L.S. (Part III. *The Sahara, continued.*)

[Continued from p. 301.]

44. PRATINCOLA RUBETRA. (Whinchat.)

45. PRATINCOLA RUBICOLA. (Stonechat.)

Both Stonechat and Whinchat are common in the oases as winter visitants. The plumage of *P. rubicola* in the Sahara is much richer in colour than in specimens obtained on the coast, which are in their turn more brilliantly marked than the generality of our British specimens. I have had, through the kindness of Sir W. Jardine, an opportunity of examining a series of the South African species (*Pratincola pastor*, Strickland), and